

**REMOTE PLASMA CLEANING SOURCE HAVING REDUCED  
REACTIVITY WITH A SUBSTRATE PROCESSING CHAMBER**

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**ABSTRACT OF THE DISCLOSURE**

A method and apparatus for cleaning a chamber in a substrate processing system having less reactivity with the chamber walls and the components contained therein. The method includes mixing a diluent gas with a flow of radicals produced by a plasma remotely disposed with respect to the chamber, at a point located between a plasma applicator and the chamber. The apparatus includes a fluid manifold having multiple inlets and an outlet with the outlet being coupled to an intake port of the chamber. One of the inlets are in fluid communication with the plasma applicator, with the remaining inlets being in fluid communication with a supply of the diluent gas. In this fashion, the diluent gas flow and the flow of reactive radicals mix when traveling between the inlets and the outlet to form a gas-radical mixture egressing from the outlet and traversing through the intake port.

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